

Forest Restoration for the Future

The scale of our restoration challenge is considerable and the urgency is unquestioned. To develop a model that works for future generations, we must work together to overcome the obstacles: declining budgets, uncertain economic conditions, outmoded thinking, and mistrust, to name a few.

We believe there are opportunities to do things differently, more effectively, at less cost, and with more transparency. Reversing the downward trend in the health of our forests requires a transformative model. We believe that a new model will emerge if we focus on the opportunities to do something truly innovative. The Nature Conservancy is committed to helping catalyze a new vision for forest restoration.

From restoring our own preserves to engaging partners on innovative approaches, The Nature Conservancy has been committed to forest restoration across Arizona for over two decades. Our vision for a new model of forest restoration aims to make communities safer, forests healthier, and our local economies more vibrant.

New Technology to Reduce Costs and Improve Results

Restoring our forests is not about cutting trees. It's about designing a forest to meet the needs of people and nature, no small challenge as evidenced by the more than 40 different types of restoration designs that harvesters will have to implement. Traditional processes may be prohibitively costly and impractical – consider the marking of trees for harvest over hundreds of thousands of acres as an example.

- The Nature Conservancy in Arizona, working through our Center for Science and Public Policy, believes that in working with contractors, harvest operators, the U.S. Forest Service's Technology Development Center, and others we can develop innovative technology that reduces costs and improves on-the-ground restoration
- What if harvesters could capture location and tree structure information from a dashboard tablet in their cabs that would reduce the time needed to select trees suitable for harvest?
- Could the Forest Service's contract administration be streamlined if they received this information in real time?

Training to Develop a Skilled Workforce

Streamlining operations and reducing costs will require a workforce trained in the essentials of working safely and responsibly in the forest and in the principles behind the desired restoration goals. New technology integrated into harvester operations will also require operator training. We believe there are opportunities to collaborate with educational institutions, economic development interests, and the private sector to enhance workforce training programs to help train the skilled creators of our future forests.

Increasing Transparency and Facilitating Continuous Improvement in Business Practices

Marrying new technology with wood harvesting operations in real-time will provide a source of information to guide wood harvesters, evaluate progress, assess the need for change, and continuously improve business practices and on-the-ground results.

- A continuous source of information on harvesting results enhances the ability to **track progress** and evaluate effectiveness of restoration efforts
- **Real-time information** establishes a factual basis for **resolving resource issues**
- Better information and an **improved understanding** of the effects of large-scale treatments can minimize injunctions on harvesting activities and subsequent economic losses
- A workforce skilled in this new approach will give them and our region a **competitive advantage**.

We cannot do this alone. We are looking for collaborators and advice. Please contact Sue Sitko our Northern Arizona Conservation Manager at ssitko@tnc.org or 928.368.6832.